September 12, 2005

Bill Moore
Water Quality Program
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Mary Shaleen-Hansen
Water Quality Program
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject Snohomish County Comments On:
(1) Preliminary Draft NPDES Municipal Stormwater Permit Dated May 16, 2005
(2) Public Review Draft Underground Injection Control Rule (Ch. 173-218 WAC)

Dear Mr. Moore and Ms. Shaleen-Hansen

Thank you for the opportunity to comment on the preliminary draft NPDES municipal stormwater permit issued on May 16, 2005, and on the public review draft Underground Injection Control (UIC) Rule (Chapter 173-218 WAC). We appreciate the time and effort you have made in numerous venues to discuss the permit and rule with our staff.

The following pages contain detailed comments on the permit. The only substantive comment on the UIC rule is that it should state that, for Phase 1 NPDES municipal stormwater permittees, Class V stormwater injection wells will be regulated solely under the NPDES permit (see comments on permit section S2 – Authorized Discharges).

If you would like to discuss our comments further, please contact Bill Leif at (425) 388-3148.

Sincerely,

Mark Soine
Deputy Executive

cc: Tom Fitzpatrick, Executive Director
Peter E. Hahn, Director, Department of Public Works
Craig Ladiser, Director, Department of Planning and Development Services
Joan M. Lee, P.E, Director, Public Works Surface Water Management Division
Bill Leif, P.E., Supervisor, PW/SWM Water and Habitat Sciences Section

Detailed comments on permit

S1 – Permit coverage and permittees

Section S1D3 requires the following special districts to obtain coverage as a Secondary Permittee: "[D]rainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S2.A above, which own or operate municipal separate storm sewers serving non-agricultural land uses." In Snohomish County, most of these districts comprise agricultural land, but may receive runoff from non-agricultural land. It is not clear whether the drainage systems "serve" only the land within the district boundary or all of the land that drains into the district, thus the requirement for coverage is ambiguous. Further, since these areas have limited authority and responsibility relative to the County, it would require significant effort to determine which entity is actually responsible for various permit conditions. Snohomish County sees no value in requiring these agricultural areas to come under a permit. **Snohomish County recommends amending this language to read: "[D]rainage, diking, flood control, or diking and drainage districts located in the Cities or designated Urban Growth Areas of unincorporated portions of the Counties listed in S2.A above, which own or operate municipal separate storm sewers serving primarily non-agricultural land uses."**

S2 – Authorized discharges

The permit and the proposed revisions to the Underground Injection Control (UIC) rule (Chapter 173-218 WAC) must be in alignment. Currently they are not, and this will undoubtedly lead to administrative and legal problems. The primary problems are as follows:

- Section S2A2 states that stormwater discharges to groundwater through infiltration wells regulated under the UIC rule are not covered under this permit, but that other stormwater discharges are covered under the permit. Given the wide diversity of stormwater facilities and the current intention to cause as much infiltration to occur as possible for environmental reasons, there will be an ever-growing confusion about which regulation applies to a given stormwater facility, and there will be a growing number of facilities that infiltrate stormwater but are not regulated under the UIC rule.
- The UIC rule requirements apply only to the infiltration well and actions performed on the 'site' of the well (presumably the legal parcel of land at which the well is located). The NPDES permit applies in general to the entire storm sewer. Thus, there would be many cases in which different management requirements would apply to different parts of the physical storm sewer system.
- The technical standards for construction, operation, and maintenance differ widely between the permit and the UIC rule.

Such confusion is likely to lead to inefficiency, increased costs of administration, and possibly unintended violations (or perceived violations) of the permit, the rule, or both, rather than the intended reduction in environmental impacts of stormwater.

Snohomish County recommends that UIC wells in municipal storm sewer systems regulated under this NPDES permit should be regulated only by the NPDES permit.

S4 – Total Maximum Daily Load Allocations

Section S4C1 requires that, if water quality monitoring is a specific requirement of a TMDL listed in Appendix 6, the permittee must develop a Quality Assurance Project Plan (QAPP). We have a number of concerns about the numerous requirements for QAPPs in the permit, including this one. First, a separate QAPP would be required for each TMDL for which water quality monitoring is required. Multiple QAPPs would contain a lot of duplicate information that would not be a benefit to either the permittee or Ecology. Second, review and approval of multiple documents would place a significant administrative burden on Ecology, and we are concerned about the availability of enough Ecology staff resources to provide such reviews in a timely manner. Third, QAPPs for monitoring under TMDLs are to be submitted to Ecology within ninety days of the effective date of the permit. In contrast, the QAPP for the overall monitoring program is due to Ecology two years after the permit effective date. This wide discrepancy in deadlines does not make sense, especially it is especially important to coordinate monitoring for areas with TMDLs with other monitoring and stormwater management activities.

Snohomish County recommends that Ecology allow permittees to submit a single QAPP for water quality monitoring under the permit, and that the QAPP submittal deadline be significantly longer than 90 days.

See also our comments on S6 – Monitoring.

S5 – Compliance with Standards

Section S5C1 appears to require the County in turn to require private developers to comply with the 2005 Ecology Stormwater Manual before it is adopted into code. This raises various concerns, including those about compliance with state vesting laws.

Snohomish County recommends deleting S5C1 in its entirety, and instead relying on the requirement to adopt and implement such standards into code according to a schedule as set forth in S7C5.

Section S5C2 requires the permittee to apply "additional controls necessary to protect beneficial uses" in the event that "site-specific information" indicates that the technical standards in the permit are not sufficient to protect said beneficial uses. This is ambiguous and problematic for several reasons. First, the definition of "site-specific information" in the permit "includes but is not limited to" various kinds of documents or information without specifying a professional or legal standard for them. Second, the permit does not state who shall determine the validity of the information. Third, this requirement sets up a situation in which substantive permit requirements could be added without the benefit of the permit modification process set forth in state administrative code. Based on conversations and meetings between Ecology staff and municipal representatives, we think that the interpretation given by Ecology about how things will really work under this section is reasonable and workable. However, the language is subject to broad interpretation, and seems ripe for the potential of lawsuits. Section S5D seems to cover the concerns of Ecology. This paragraph simply states the obvious – that Ecology has the right to revoke and reissue or modify the permit if it deems it necessary and has just cause.

Snohomish County recommends deleting S5C2, since it seems both superfluous and troublesome.

Sections S5A, S5B, and the lead paragraph of S5C refer to compliance with specific standards, but section S5C2 refers to protection of beneficial uses.

Snohomish County recommends referring to standards throughout S5, using identical language in all references to avoid confusion.

S6 - Monitoring

The permit proposes a vast, broad-spectrum monitoring program that will be extremely costly. Snohomish County thinks this proposal is unfocused, and would be largely a waste of money.

Snohomish County proposes that the monitoring program under the permit should be directed at two points: determining the current status and potential trends in important water quality parameters and indices in receiving waters, and answering specific questions related to stormwater management actions that would either reduce the cost of a program with no reduction in effectiveness, or would improve the effectiveness of a program without increasing cost. There are a number of specific questions and hypotheses that such a monitoring program could answer. Such a program should be coordinated within the region, but this should not be a primary requirement, since each permittee may have a specific question or data need that is most important in that jurisdiction and less important elsewhere.

Also, Snohomish County recommends requiring a single annual report that contains information about monitoring, as opposed to two separate reports with two separate deadlines.

S7 – Stormwater Management Program

S7A2 – Fiscal tracking

The permit requires tracking of SWMP development and implementation costs. As has been discussed for years, we do not like this requirement. First, general cost tracking as envisioned in the permit has no inherent value to permittees with regard to stormwater management. We may have specific situations in which we want to compare costs, but in those cases we would want specific analyses, and it is unlikely that some general cost accounting described outside of the situation would suffice. Second, while such cost tracking is presumably of use to Ecology for comparisons among permittees, Ecology has no criteria for cost accounting, which confounds using the reported numbers. Third, it is difficult to find ways to calculate costs for different activities, each of which may be performed for multiple purposes, such as maintaining ditches in a certain way, such that the costs can simply be added to get some "total cost for compliance." Fourth, there is no single method for calculating the cost of preventing pollution by not performing an action, such as not using pesticides in the right-of-way. Fifth, such numbers become fodder for lawsuits in which the plaintiffs might claim that we did not calculate costs properly. Finally, it is difficult to convey increased efficiencies; reduced expenditures inevitably can be presented as backsliding.

All this said, we understand that the requirement arises in federal regulations and therefore cannot be deleted wholesale by Ecology. Further, we like the fact that Ecology has apparently tried to write the requirement so that it will take minimal effort to comply. However, **Snohomish County recommends that Ecology develop simple criteria for counting each cost it wants tracked. That way, we do not have to make up the methods, and Ecology will get costs that are generated by the same methods from each permittee.**

S7C2 – Storm sewer mapping / data management

The lead sentence in this section requires collection and management of information and acceptable forms of retention that "shall include but not be limited to" a list of things. This is ambiguous.

Snohomish County recommends that the permit state clearly the required list of information and acceptable forms of retention.

Section S7C2(a) requires us to map "all known municipal separate storm sewer outfalls and receiving waters…" The average reader of this permit may not ascertain that many outfalls of our storm sewer system do not discharge to receiving waters, but rather to storm sewers on private property. Permittees do not usually have the legal authority to enter private property for the purpose of mapping private storm sewers.

Snohomish County recommends stating that the requirement is to map outfalls to the municipal storm sewer, in order to prevent confusion and potential incorrect perceptions of permit violations regarding inadequate mapping.

Section S7C2(b) requires permittees to map "tributary conveyances, the associated drainage areas, and land use of all municipal separate storm sewer outfalls with a 24" inches nominal diameter or larger, or an equivalent cross-section area for non-pipe systems, and indicate type, material, and size where known." This requirement would place an artificially high priority on mapping rural open-ditch systems over urban and suburban pipe systems. The size of a pipe is determined by an engineer based on the calculated design flow. A 24-inch diameter pipe is a relatively big storm sewer pipe. Ditches, on the other hand, have minimum dimensions according to design standards, regardless of flow, and the minimum dimensions always have a significantly larger cross-sectional area than a 24-inch pipe (3.14 square feet). This section in effect requires mapping all rural road drainage systems, associated drainage areas, and land uses, which seems to place a large amount of resources where it is needed least as a rule.

Snohomish County recommends instead that the permit require mapping of these attributes within Urban Growth Areas and other areas with documented stormwater quality problems.

Section S7C2(c) requires mapping of "areas served by the Permittee's MS4 that discharge stormwater to groundwater." This requirement is both extremely broad in its geographic extent and vague in the performance requirement. It is hard to think of a place in Snohomish County where stormwater from the MS4 could not in theory discharge to groundwater in some quantity, so if the requirement is to actually map the MS4 in these areas this turns into a requirement to map the entire drainage system, which we think would be a poor prioritization of resources for the reasons mentioned above. Alternatively, if the requirement is to produce a map of such areas, a map of the County would suffice, but it is hard to believe that this is what Ecology wanted. And paragraph (a) of this section requires a map of all structural BMPs, which would include infiltration systems, so nothing is gained if that is the intent.

Snohomish County recommends reconsidering whether this requirement adds anything of use, and either clarifying it or deleting it.

Section S7C2(g) requires submittal of GIS data in a specified format. Snohomish County currently publishes digital drainage data on our website in the proposed format, with the exception that our vertical data conform to NGVD 88, not NGVD 29.

Snohomish County asserts that publishing data in this format should be adequate for the purpose of "submitting" data to Ecology, and recommends that the language in this section be revised accordingly.

S7C5 – New development runoff control

S7C5(b)(i) requires that the Minimum Requirements, thresholds, and definitions in Appendix 1 must be adopted in ordinance or other enforceable documents. This language does not explicitly allow for equivalent language or requirements that bring about the same outcome. It is critical to allow such equivalents, since Ecology uses terms that must be (and are) defined in local codes, but which may be defined uniquely for each municipality. Similarly, there are undoubtedly many requirements in local codes that have the same outcome, but are expressed in different ways among municipalities. It would be an enormous effort and cost to revise municipal codes to adopt all of Appendix A verbatim, and most of this effort and cost would not further the goal of stormwater pollution prevention.

Snohomish County recommends revising the first sentence of this section to read: "The functional equivalent of the Minimum Requirements, thresholds..." Alternatively, we recommend adding a separate sentence to this section such as: "The ordinances and other enforceable documents may contain alternative language, terms, and definitions, provided that the documents contain the functional equivalent of each requirement in Appendix 1." Such language should also be included in sections S7C5(b)(ii), S7C5(b)(v), and such language should apply to the reference to Appendix 2 in S7C5(b)(vii)(2).

Section S7C5(b)(v) requires submittal of all codes, other enforceable documents, and associated equivalent technical manuals to Ecology no later than 8 months from the effective date of the permit. Snohomish County asserts that this is an unreasonable deadline. This is a very large undertaking, and the same effort for the existing permit required more than one year of very intensive work by County staff, plus intensive discussions with Ecology staff. Also, since these codes are land use codes, they must be adopted in accordance with procedures set forth in the State Growth Management Act, which will add significant process.

Snohomish County recommends that at least 12 months should be allowed for submittal of the codes, standards, technical manuals, and related documents.

S7C7 – Source control program

S7C7(a)(iii) contains various prohibitions against referring stormwater problems associated with NPDES industrial permittees to Ecology. These prohibitions do not appear to be within the scope of what can be required or prohibited by an NPDES permit. As written, any such referral would constitute a permit violation. It is the responsibility of Ecology to determine how to respond to such referrals, and to take action if Ecology thinks a permittee is not taking adequate code enforcement action under its permit.

Snohomish County recommends deleting all but the last sentence of section S7C7(a)(iii).

S7C7(b)(i) requires adoption of an ordinance within 12 months of the effective date of the permit. As with the required revisions to the development codes, this will require a significant effort, significant interaction with Ecology to develop, and, since it is a land use code, adoption by processes required by the State Growth Management Act.

Snohomish County recommends that the deadline be changed to submittal of a code to Ecology within 12 months of the permit's effective date.

S7C7(b)(i) requires that "[S]tructural source control BMPs shall be required for pollution generating sources that cause an illicit discharge or other pollution problem, including: causing or contributing to a violation of surface water, ground water, or sediment management standards; nuisance; or threat to public health and safety, because of inadequate stormwater controls." This language goes far beyond the scope of what is regulatable under an NPDES permit, and the language in S5 that defines generally the conditions for compliance with the permit – "compliance with applicable surface water, groundwater, and sediment management standards." Suffice it to say that there is a wide world of nuisances and threats to public health and safety that could be associated with stormwater, and that would occur without violations of said standards.

Snohomish County recommends limiting this section to say that structural source control BMPs shall be required for pollution generating sources that cause an illicit discharge, or cause or contribute to a violation of surface water, ground water, or sediment management standards because of inadequate stormwater controls.

S7C7(b)(ii) contains the term 'multifamily.' This term is not defined in the permit, and can have various definitions among municipalities.

Snohomish County recommends defining the term 'multifamily,' after review of the definitions in land use codes of the Phase 1 permittees.

S7C7(b)(iii) requires permittees to conduct inspections on private properties with the purpose of enforcing the codes adopted under S7C7(b)(i). Section S7C1(b)(vi), Legal

Authority, contains the phrase "[W]ithin the limitations of state law" to recognize limitations that the State constitution places on entry into private property by government agencies.

Snohomish County recommends appending the phrase "within the limits of state law" to the end of the first sentence of S7C7(b)(iii), so that it reads: "…in accordance with the ordinance required in S7.C.8.b.i, above, *within the limits of state law*."

S7C7(b)(iv)(4) places prohibitions against communications from a permittee to Ecology regarding stormwater problems associated sites that could have NPDES industrial stormwater permit. As with similar prohibitions in S7C7(a)(iii), these prohibitions are problematic and not within the scope of what can be required within an NPDES permit.

Snohomish County recommends deleting S7C7(b)(iv)(4) entirely.

S7C8 – Illicit connection and discharge elimination

S7C8(b)(vi)(2) requires screening of "all the municipal separate storm sewers" located in one half of the urban growth areas and urbanized areas within the unincorporated County within the term of the permit, and S7C8(b)(vii) allows for basing an illicit discharge screening program on the illicit discharge guidance published by Pitt et al. (2004) or other alternative methods that have been approved by Ecology. Snohomish County's existing illicit discharge program is based on the 2004 manual by Pitt et al., which includes methods for assessing and prioritizing areas in which to perform field work as well as descriptions of the proper field tests. However, since judgment is still needed on the part of the permittee, Ecology review and approval of a field program is appropriate.

Snohomish County recommends that the permit require permittees to submit an illicit connection and discharge elimination program to Ecology for review, with a specified approval process and schedule. Further, until such approval is given, Ecology should explicitly state that current Phase 1 screening programs meet the permit requirements.

S7C8(b)(viii)(2) requires permittees to "ensure termination" of illicit connections within 180 days of confirmation. This may not always be possible, since construction of alternatives such as sanitary sewer extensions may be required, and since the enforcement process could easily be extended past six months due to appeals.

Snohomish County recommends revising this section to read: "Termination: Upon confirmation of the illicit nature of a storm drain connection to the municipal storm sewer, permittees shall take timely action to remove the connection in accordance with the local code of the permittee.

S7C8(b)(ix) addresses spill response. Snohomish County does not operate emergency services for hazardous material spill response, or respond to fires or spills that could result in fire or explosion. Emergency response in the County is managed through a regional emergency dispatch network, and handled by a number of cities, special districts, and the state. The County's role is to take part in the regional network, and to coordinate this agency's actions with the County's Department of Emergency Management. This circumstance may be similar in the other Phase 1 counties.

Snohomish County recommends that this requirement be rewritten to clarify that a permittee's spill response duties might not include direct responsibility for emergency field response.

S7C8(b)(ix) requires permittees to "investigate, as soon as possible, within 24 hours, those problems/violations judged to be urgent or severe, or reported as emergencies." In addition to the general issue raised above, this statement is vague. First, it does not specify who would judge a problem as 'urgent or severe.' Second, non-emergent events could be reported by citizens as emergencies, and it does not make sense to require an emergency service agency to respond simply because someone thought there was an emergency.

Snohomish County recommends that this statement be deleted, since such activities and schedules would naturally be included in the spill response plan described earlier in the paragraph.

S7C9 – Storm sewer operation and maintenance

Section S7C9.b.i. requires adoption of the functional equivalent of the maintenance standards in Volume V of the 2005 Ecology Stormwater Manual within 12 months of the effective date of the permit. In Snohomish County, these standards would be adopted by the revisions to the drainage and grading code discussed in comments on Section S7C5.

In accordance with our comments above, Snohomish County recommends that at least 12 months should be allowed for submittal of the codes, standards, technical manuals, and related documents.

Section S7C9.b.i. requires performance of maintenance triggered by inspection in a "timely manner," and the examples given may be too restrictive. Snohomish County performs a lot of inspections in winter and early spring, but most of the maintenance work occurs in the summer. This is partly due to equipment availability (vactor trucks are busy with flooding in winter), partly due to the nature of the work, which requires dry ground or non-flowing water, and partly due to our permits, including HPA and grading permits, which limit work to certain seasons. We would not want a specific deadline for

maintenance work that would require us to work outside our permits or require work that would have a greater chance of creating erosion or other pollution problems. In addition, any capital work, even that of less than $25,000, usually requires more than one year to design, obtain proper permits, and hire contractors. The annual budget is finalized at least one year before construction season.

Snohomish County recommends revising the examples given of a "timely manner" to 9 months for typical maintenance, 12 months for revegetation, and 24 months for maintenance requiring capital construction.

Section S7C9.b.ii(1) requires permittees to adopt codes or other enforceable documents that require application of the maintenance standards described above to all permanent stormwater facilities "regulated by the permittee." As with the code requiring source control BMPs on private property, this section should contain the limitation on local governments' ability to enter private property that was acknowledged in Section S7C3.

Snohomish County recommends appending the phrase "within the limits of state law" to the end of the first sentence of S7C7(b)(iii), so that it reads: "…in accordance with the maintenance standards established under S7.C.9.b.i, above, *within the limits of state law*." This limitation should also be explicitly contained in Sections S7C9(b)(ii)(2)-(5).

A significant number of detention facilities regulated by Snohomish County were built to design standards that predate the standards set forth in the 1992 Ecology Stormwater Manual. These facilities typically detain only the 10-year peak flow, and many were built without establishing clear easements allowing the County to maintain them. These facilities have been the focus of the County's capital water quality retrofit program under the existing permit. However, we think that requiring the County to inspect and maintain these facilities to the standards set forth in the new permit will not significantly improve water quality, and will add a significant administrative burden to the County.

Snohomish County recommends amending Section S7C7(b)(ii)(2) to read as follows: "…an initial inspection schedule for all stormwater treatment and flow control facilities regulated by the permittee <u>that were designed and built according to the equivalent of the standards of the 1992 Stormwater Management Manual for the Puget Sound Basin, or later standards promulgated by Ecology,</u> that ensures inspection…"

Snohomish County also recommends amending Section S7C7(b)(ii)(3) to read: "…to ensure annual inspections of all stormwater treatment and flow control facilities regulated by the permittee <u>that were designed and built according to the equivalent of the standards of the 1992 Stormwater Management Manual for the Puget Sound Basin, or later standards promulgated by Ecology.</u> The annual inspection schedule…"

Section S7C9(b)(iv)(1) requires annual cleaning of catch basins, and allows for a "circuit basis" of inspection and cleaning. Given the number of catch basins in the County, it also seems reasonable to allow less frequent inspections of areas in which past experience has indicated that maintenance is needed less frequently, in the same manner as allowed for stormwater flow control and treatment facilities in Section S7C9(b)(i)-(iii). Our Road Maintenance Division claims knowledge that there are many areas where annual inspections would continually indicate that no maintenance is needed. However, they have not kept written records of the data supporting this knowledge, since, unlike detention facility maintenance, there was no operational need for such records. This activity is one of the highest cost programs under the permit, and it is imperative to make sure it is as efficient as possible. In the absence of formal maintenance records, which will be generated under the next permit as required in S7C9(b)(v), we think that formal statements made by the Road Maintenance Division about historical knowledge should be allowed at the outset of implementing the next SWMP. These statements would be included in the SWMP document, which will need to be signed by the County Executive with a statement swearing that the document is true under penalty of perjury.

Snohomish County recommends amending Section S7C9(b)(iv)(1) by adding the following text as a separate paragraph at the end of the section: "The annual inspection schedule may be changed to a lesser or greater frequency of inspection, as appropriate to ensure compliance with maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the permittee may substitute formal sworn statements proposing a specific less frequent inspection schedule for specific circuits, not to exceed three years, based on actual inspection and maintenance experience."

Section S7C9(b)(iv)(2) requires "cleaning of private catchbasins and inlets whenever they are found to be out of compliance with adopted maintenance standards." This implies that the County will be inspecting storm sewer conveyance systems on private property; this is not categorically required anywhere in the permit, and it should not be so required.

Snohomish County recommends amending this section to read as follows: "The permittee shall require cleaning of private catch basins if they are found to be out of compliance with adopted maintenance standards in the course of inspections conducted at facilities under the requirements of S7C7 - Source Control Program and S7C8 – Illicit Connections and Illicit Discharges Detection and Elimination, or if the catch basins are part of flow control or treatment systems inspected under the requirements of S7C9."